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AN INVESTIGATION INTO THE CAREER PROGRESSION OF SOLDIERS WHO RE--ETC(U)
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An Investigation into the Career Progression
of Soldiers Who Require Remedial Training
During Recruit Training

by

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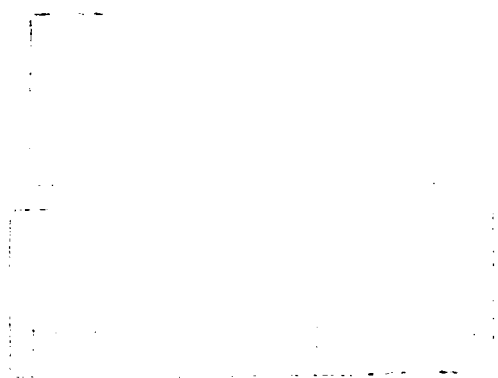
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Abstract

The career progression and performance of 76 soldiers who required remedial training during recruit training, was compared with a sample of peers. A significant difference on the variables performance on recruit training, performance on IET, selection for subject one for corporal and charges was found, as well as a non significant trend for poor performance on all other variables. It was concluded that recruits who require remedial training are able to give effective service, albeit at a slightly lower level than their peers.

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The findings and view expressed in this Research Note are the result of the author's research studies and are not to be taken as the official opinion or policy of the Department of Defence (Army Office).

Due to individual differences in such characteristics as ability, adjustment, stress tolerance, motivation, etc. the performance of individuals on any task or series of tasks will differ. During recruit training some individuals in each platoon fail to keep pace with their peers and fall behind in their training. The problem is often exacerbated in that the highly structured recruit course offers little spare time for the individual to try to improve his performance.

In the past those recruits who were identified as poor performers were "backsquadded", ie taken out of their platoon and placed in another that was one or more weeks behind them. The failing recruit continued in the normal training programme, with no special attention paid to his particular weakness.

In 1977 that situation changed. A remedial training platoon was set up to cater for those individuals who were experiencing training difficulties. The rationale of the retraining platoon was that those individuals experiencing training difficulties could take some time out from normal training (usually two weeks) to concentrate on those areas in which they were experiencing problems, eg. those individuals having trouble with drill spent proportionately more time on that. More free time was also available and individual practice encouraged. The instructor/recruit ratio was also higher, allowing each recruit to receive more individual attention in both training and counselling.

Before being transferred to the remedial training platoon, most recruits were scheduled for an interview with a psychologist who made recommendations as to the future handling of the recruit. Regular contact was maintained between the psychologist and the remedial training platoon staff and records of the recruit's progress were maintained.

In the first 12 months of its operation 130 recruits received extra training in the remedial training platoon. Of these, 79 (61%) eventually marched out of the Recruit Training Battalion (1 RTB). Viewed from the standpoint of 1 RTB the effort therefore seems worthwhile. The question remains as to how those individuals, who require remedial training early in their Army careers, fare after they march out of recruit training. Are they indistinguishable from their peers, or do they continue to exhibit performance discrepancies?

This research compares the performance over the first three years of service, of the first 79 recruits to successfully complete remedial training and march out of 1 RTB, and a sample of peers.

Method

Subjects

The remedial training sample consisted of the 79 recruits who successfully completed remedial training and marched out of 1 RTB. Of these the subsequent records of 3 recruits could not be located and these were eliminated from the sample.

The comparison sample was generated by adding one to the regimental numbers of the remedial training sample. If the individual so generated was not a male general enlistment (MGE) soldier a further one was added to the regimental number until an appropriate comparison was located. This method of selection allowed partial matching of the comparison sample for factors such as time and military district of enlistment and effect of training environment. However three of the remedial training sample with Army Reserve regimental numbers could not be matched. In addition 7 of the comparison sample were discharged as not suited to be a soldier (NSTBS) before completing recruit training and these were eliminated from the comparison group, leaving a total of 69. The elimination of these soldiers was necessary to match the remedial training sample which contained only soldiers who marched out of 1 RTB.

Data Collection

The soldiers' personnel files kept by the Central Army Records Office (CARO) were examined and information relating to each soldier's performance during his career was collected. This information consisted of method of entry into the Army, performance rating in recruit training, performance on promotion subjects when applicable, promotion when applicable, confidential reports when submitted, number of charges and outcome of service.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) (Nie et al 1975) subprogram Crosstabs was used to analyse the data, with the remedial training sample and the comparison sample being compared for each variable. A significance level of $\alpha = .01$ (two tailed) was set. A conservative α level was selected because of the ex post facto nature of the research.

Results

Method of Entry

There was no significant difference between groups on method of entry, with 46% of both enlisting in the Australian Regular Army (ARA) and 54% enlisting in the Australian Regular Army Army Supplement (ARAS (0)) (corrected $\chi^2(1) = .02$, ns). The results are shown at Table 1.

TABLE 1
COMPARISON BY METHOD OF ENTRY

Sample	Method of Entry	
	ARA	ARAS (0)
Remedial Training	35	41
Control	32	37

Corrected $\chi^2(1) = .016$. Significance = .898

Performance on Recruit Training

On completion of their recruit training recruits are graded on a five point performance scale by their platoon staff. The gradings given are poor, below average, average, above average, good. Overall the comparison sample was graded as significantly better performers than the remedial training sample ($\chi^2(4) = 22.38$, $P < .01$). The results are shown in Table 2. Six cells in this table have an expected frequency of less than 5. If the categories "good" and "above average" are collapsed, the result remains significant ($\chi^2(3) = 20.08$, $p < .01$). In addition if the categories "poor" and "below average" are also collapsed the result is still significant ($\chi^2(2) = 22.8$, $p < .01$).

TABLE 2
COMPARISON BY PERFORMANCE AT 1 RTB

Sample	Performance Rating				
	Good	Above Average	Average	Below Average	Poor
Remedial Training	1	5	41	25	4
Control	2	20	36	6	1

$\chi^2(4) = 22.38$. Significance = .000

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Performance on Initial Employment Training (IET)

After marching out of 1 RTB recruits proceed to the appropriate corps school for initial employment training. Due to the lack of similarity between training courses and the lack of standardisation in performance grading, a pass/fail criterion was used for analysis. The comparison sample performed significantly better on IET with 97% passing compared to 81% of the remedial training sample (corrected $\chi^2(1) = 7.04$, $p < .01$). The results are shown in Table 3.

TABLE 3
COMPARISON BY PERFORMANCE ON IET

Sample	IE. Result	
	Pass	Fail
Remedial Training	60	14
Control	63	2

Corrected $\chi^2(1) = 7.04$. Significance = .008

Selection and Performance on First Course

Selection for courses subsequent to IET is on an as required, as available basis. Selection for at least one course was not significant, with 58% of the remedial training sample and 50% of the comparison sample being selected. ($\chi^2(1) = 1.03$, n.s.). Neither was performance (pass/fail) on the first course significantly different, with 82% of the remedial training sample and 94% of the comparison sample passing. (corrected $\chi^2(1) = 1.73$, ns) The results are shown at Table 4.

TABLE 4
COMPARISON BY PERFORMANCE ON FIRST COURSE

Sample	First Course Result		
	Pass	Fail	Total
Remedial Training	36	8	44
Control	33	2	35

Corrected $\chi^2(1) = 1.73$. Significance = .189

Selection and Performance on Second Course

Selection for and performance on a second course were also not significant. For the remedial training sample 22% were selected and 71% passed. While for the comparison sample 27% were selected and 87% passed. (corrected $\chi^2(1) = .448$, ns). The results are shown in Table 5.

TABLE 5
COMPARISON BY PERFORMANCE ON SECOND COURSE

Sample	Second Course Result		
	Pass	Fail	Total
Remedial Training	12	5	17
Control	13	2	15

Corrected $\chi^2(1) = .448$. Significance = .503

Performance on Subsequent Courses

The number selected for attendance at more than two courses was too small for analysis and has therefore been omitted.

Selection and Performance on Subject One for Corporal

A significantly greater number of the comparison sample was selected for Subject One for Corporal, (corrected $\chi^2(1) = 6.80$, $p < .01$), but performance on the course once selected is not obviously worse for the remedial training sample. For the remedial training sample 20% were selected and 93% passed. The results are shown at Table 6.

TABLE 6
COMPARISON BY PERFORMANCE ON SUBJECT 1 FOR CORPORAL

Sample	Subject 1 (CPL) Result		Total
	Pass	Fail	
Remedial Training	14	1	15
Control	26	1	27

Corrected $\chi^2(1) = .105$. Significance = .746

Selection and Performance on Subject Two for Corporal

There was no significant difference between the groups on selection for Subject Two for Corporal (corrected $\chi^2(1) = 2.61$, ns). For the remedial training sample 7% were selected and for the comparison sample 16% were selected. The number of people selected was too small for an analysis of performance using χ^2 . Fisher's Exact Test produced a p of .92 which is clearly not significant. The results are shown at Table 7.

TABLE 7
COMPARISON BY PERFORMANCE ON SUBJECT 2 FOR CORPORAL

Sample	Subject 2 (CPL) Result		Total
	Pass	Fail	
Remedial Training	4	1	5
Control	10	1	11

Fishers Exact = .917

First Confidential Report

Soldiers may have a confidential report submitted on them for a number of reasons, the most common for private soldiers being promotion, completion of Subjects for Corporal or warning for discharge. In addition all NCO's are reported on annually. The reports include an overall rating of performance scale as follows:

- a. Well above the standard required of his rank;
- b. Above the Standard required of his rank;
- c. Well up to the standard required of his rank;

- d. Up to the minimum standard required of his rank; and
- e. Below the standard required of his rank.

Because of the variety of reasons for which a confidential report is submitted a comparison of the number of soldiers reported on is not warranted. Similarly a comparison of the ratings given might be expected to be biased by the reason for which the report is submitted. Unfortunately no meaningful statistical analysis can be performed on these data as insufficient numbers appear in several of the cells in the table and collapsing across categories would detract from any meaningful interpretation. A χ^2 (4) performed on the data gave a significance level of .1178 showing a trend to no difference in performance. Interpretation however should proceed with caution. The results are shown at Table 8.

TABLE 8
COMPARISON BY FIRST CONFIDENTIAL REPORT

Sample	Overall Rating				
	Well Above Standard	Above Standard	Well up to Standard	Up to Minimum Standard	Below Standard
Remedial Training	1	6	6	2	4
Control	1	16	2	1	2

$$\chi^2(4) = 7.365. \quad \text{Significance} = .118$$

Second Confidential Report

Insufficient numbers received a second confidential report to allow any statistical analysis. The data have been omitted.

Promotion

There is no significant difference between the two groups on promotion ($\chi^2(3) = 4.25$, ns). Of the remedial training sample six were promoted to Lance Corporal, one to temporary Corporal and four to Corporal. Of the comparison group eight were promoted to Lance Corporal, three to temporary Corporal and eight to Corporal. If the categories Temporary Corporal and Corporal are collapsed to provide larger cell numbers, the result is still not significant ($\chi^2(3) = 3.41$, ns). The results are shown at Table 9.

TABLE 9
COMPARISON BY PROMOTION

Sample	Rank			
	PTE	LCPL	T/CPL	CPL
Remedial Training	65	6	1	4
Control	50	8	3	8

$$\chi^2(3) = 4.248. \quad \text{Significance} = .236$$

Charges

In terms of charges the difference between the groups closely approaches significance. ($\chi^2(3) = 11.25$, ns). More of the remedial training sample tend to be charged and there is a tendency for them to be charged more often. The results are shown at Table 10. Only charges on which convictions occurred after marching out of 1 RTB were taken into account.

TABLE 10
COMPARISON BY NUMBER OF CHARGES

Sample	Number of Charges			
	1	2	3	4 or more
Remedial Training	13	11	6	17
Control	17	14	1	4

$$\chi^2(3) = 11.252. \text{ Significance} = .0104$$

Outcome of Service

The outcome of service was divided into the categories: still serving, discharged medical, discharged at own request, discharged end of engagement, discharged as unsuitable to be a soldier, discharged retention not in the interests of Australia or Army, and discharged absent without leave. There was no significant difference between the two groups, ($\chi^2 = 14.04$, ns). These data were also reanalysed by collapsing into three categories: "still serving", "unsuitable discharge" and "other discharge". No significant difference was found. ($\chi^2(2) = 3.19$, ns). The results are shown at Tables 11 and 12.

TABLE 11
COMPARISON BY OUTCOME OF SERVICE

Sample	Outcome of Service						
	Still Serving	Medical	AOR	Discharge End Eng	NSTBS	RNIIAA	AWOL
Remedial Training	38	1	6	11	12	2	6
Control	37	2	4	16	1	5	4

$$\chi^2(6) = 14.04. \text{ Significance} = .045$$

TABLE 12
COMPARISON BY OUTCOME OF SERVICE (COLLAPSED)

Sample	Outcome of Service		
	Still Serving	Discharged Unsuitable	Discharged Other
Remedial Training	38	20	18
Control	37	10	22

$$\chi^2(2) = 3.189. \text{ Significance} = .120$$

Discussion

Of the 15 variables examined, significant differences between the remedial and comparison groups were found with four; performance on recruit training, performance on IET, selection for subject one for Corporal and charges. In addition there was a non significant trend in all remaining performance oriented variables for the comparison sample to outperform the remedial training sample.

Of the variables achieving significance, the recruit training performance rating must be treated with some suspicion. By the time recruits are transferred to the remedial training platoon they have had a six week history of training failure and more often than not their morale is very low. In addition for the remainder of their training they have to carry the not inconsiderable stigma of having been in the remedial training platoon, or "F troop" as it is known at 1 RTB (note 1). It is therefore likely that their lower performance rating for recruit training reflects not only poorer performance, but is contaminated by morale effects and halo effects. It is also possible that some of this carries over and effects performance on IET.

To the extent that selection for a subject one for corporal course is a reflection of performance on the job, the higher rate of selection of the comparison sample adds support to the general trend of better overall performance by that sample. However the fact that members of the remedial training sample, once selected for a subject one course, do not seem to perform significantly worse on the course than the comparison sample, suggests that the remedial training sample, given the opportunity, can perform adequately and be all but indistinguishable from their peers.

Insufficient data were collected to enable further analysis of the finding that more of the remedial training group are charged and more frequently. Information on the nature of the offence might shed more light on this finding.

The most notable finding of this study is the fact that over a wide range of assessments, the performance of the remedial training sample is not significantly worse than their peers. The poorer performance at 1 RTB and on IET suggests that it takes this group longer to adjust to service life, but once this hurdle has been overcome they are able to perform adequately, albeit at a slightly lower level than their peers. Their selection and performance on courses, promotion rates, attrition rates and their confidential reports all support this conclusion. This is not to say that the remedial training sample does not continue to experience training problems after having successfully completed recruit training. More of them fail IET, they are charged more frequently and more of them seem to be discharged as not suited to be a soldier. This seems to indicate that the adjustment and training problems which become evident at 1 RTB continue to some extent during the next three years, and this is evidenced by a trend to lower performance across all variables measured. The problems are such however as to make the remedial trainees all but indistinguishable from their peers. The performance of the two groups overlap to such an extent that for most variables the differences are not significant. In addition at the end of the three year period studied, 50% of the remedial training sample were continuing to give satisfactory service. This compares to 54% of the comparison sample.

It was originally intended to compare statistically the two groups using biodata collected at their recruiting interview. This was planned on the notion that it might be possible to predict those who may need remedial training. The results to date however make this seem a futile exercise. If the remedial training group who march out of 1 RTB can give comparable performance, there seems little point in identifying them prior to their performance difficulties arising. There is in fact a danger in this, as an identification of

Note 1. From the TV series about a troop of bungling incompetents in the US Cavalry.

an individual to the training staff as a potential problem, may act as a self fulfilling prophecy, by drawing undue attention to that individual's performance.

CONCLUSION

The setting up of the remedial training platoon met with a variety of responses from the staff at 1 RTB, with opinions ranging from unqualified support to "it's a waste of time" and "failures should be got rid of at the first sign of weakness". The decision to persevere with recruits experiencing training difficulties is one affected by many variables including cost effectiveness, manpower demand and supply, service responsibility to the individual etc. This study supports the view that failing recruits are worth persevering with and that given appropriate support early in their careers, those who successfully complete recruit training are able to merge into the mainstream of the Army and give effective service comparable with that of their peers.

References

Nie, N.H., Hull, L.H., Jenkins, J.G., Steinbrenner, K., Bent, D.H. Statistical Package for the Social Sciences. N.Y.: McGraw - Hill Inc., 1975

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